



US Army Corps
of Engineers

MIDDLE EAST DISTRICT

**CENTER OF STANDARDIZATION -
CONTINGENCY DESIGN STANDARDS**

**Non-Permanent
Shoot House**

Facility Standard

December 18, 2014

Description:

This Facility Standard establishes the minimum facility capability baseline for all Theaters across the Unified Land Operations (ULO) spectrum of operations sub-categorized by function/task and mission profile that delineates levels of service (e.g., initial entry (first 180 days), temporary (NMT 2-years), semi-permanent (NLT 2-years and NMT 5-years). Theater unique requirements commonly executed within a geographic region are "special considerations" and contained in the "Specific Theater Design Considerations" segment of the Guidance Section of this Facility Standard.

Applicability:

- The Non-Permanent Operations Center (hereafter referred to as the NPOC) Facility Standard establishes the baseline planning, design, and construction thresholds for all NPOC functional spaces unless otherwise stipulated (e.g., Theater Options) by superseding Service requirements that cannot be met without a request for deviation (see Waivers below).
- This Facility Standard shall be used in conjunction with the Army Facility Component System (AFCS) with Force Structure, operational, and logistics having priority over technical considerations.
- This Facility Standard applies equally to all Non-Permanent facilities of this type and within the mission consideration parameters outlined in the Description above for Initial, Temporary, and Semi-Permanent. When feasible mandatory requirements and guidance for semi-permanent facilities should be incorporated into the design of temporary facilities.
- This Facility Standard supersedes Service space allowance Facility Standards and/or any permanent construction standards and criteria developed by the Services, and serves as the primary authority for Non-Permanent facilities worldwide.
- This facility is excluded from complying with the Architectural Barriers Act Accessibility Standard for Department of Defense Facilities and the October 31, 2008 DoD Memorandum "Access for People with Disabilities" due to its use only by able-bodied military personnel.
- This facility is not required to provide the code required drinking fountains.
- This Facility Standard applies to standalone facilities containing only the functional space described in this Facility Standard, as well as multiuse, facilities that contain functional spaces described in this Facility Standard.

Waivers:

- Only the COE has the authority to approve exceptions or deviations to this Facility Standard.
- Waiver Request from this Facility Standard shall be submitted by either the Combatant Command (COCOM), Land Component Command (LCC), or Army Service Component Command (ASCC) J/G-4 and forwarded to the Office of the Chief of Engineers , OCE.
- All Waiver Requests shall include Command endorsement of cost, logistics and time or delay to implement the deviation cited.
- Deviations will cite specific metric or threshold in question, any relevant citation or requirements to identify the existing conflict requiring resolution, compelling justification or detailed operational or mission impact if deviation is denied.
- All waiver requests to this Facility Standard requires Contingency Facilities Center of Standardization (C-COS) review, adjudication, and/or conflict resolution prior to submission by the appropriate J/G-4 activity cited above.

- All COE approved waivers shall be documented in the appropriate Theater mission/master plan (generally, either the logistics plan or operations plan of the J/G-staff) thereby serving as the modified standards for the facility type affected within confines of the mission scope and duration.
- Permanent construction standards, criteria, and technical engineering guidance may be considered to the extent feasible within the mission context or operational parameters. However, citation of permanent construction standards, criteria, or technical guidance is NOT sufficient, sole justification for deviating from this Facility Standard.
- Late submissions and/or execution delays are NOT sufficient stand alone justification for accelerated review or other dispensation to meeting the Facility Standard contained herein.
- As a non-permanent or expeditionary construction solution, this Facility Standard cannot afford a lengthy adjudication process. Hence, any Waiver Request will be reviewed and adjudicated only once. Multiple submissions absent fundamentally compelling or new facts will not be re-considered. Hence, specificity and definitive explanation of what needs to be deviated from, how that deviation will be met, and a compelling justification of operational or mission impact (what specifically cannot be met) is imperative when submitting a Waiver Request.
- A permanent record of Waiver Requests and their final outcome will be maintained by the C-COS for future trend analysis and refinement of Facility Standards, lessons learned, or future adjudication.

The Facility Standard table(s) establishes thresholds (minimum acceptable) for mandatory requirements contained in this Facility Standard. Deviations from Facility Standard table(s) require waiver approval PRIOR to design implementation or construction execution.

The Guidance Section provides instructions and definitions necessary for the application of the mandatory requirements, thresholds, and metrics outlined and described within the Facility Standard table(s). .

As such, they are used in conjunction with the Facility Standard in order to consistently ensure the intent and embedded functionality contained herein will meet the operations requirements for Non-Permanent facility construction within the mission parameters and fiscal constraints for the COCOM Commander.

FACILITY STANDARD

ITEM	MANDATORY CRITERIA	Mission Phase
Site Selection & Planning	Provide when the Commander determines a standalone Shoot House is required. Site the Shoot House with adequate standoff distance per DA PAM 385-64.	Initial/Temporary/Semi-Permanent
Shoot House	Meet service approved standards.	Initial/Temporary
	Building area minimum of 158 m ² to maximum of 418 m ² gross area, for Type IIB non-combustible construction. Type VB combustible construction should not be used.	Semi-Permanent
Toilets	Provide latrine within 100 meters. Latrine NMT 3.7 (ADA compliant) and NLT 1.4 gross m ² per person Toilet ratio is NLT 1:20 and NMT 1:10 Lavatory ratio is NLT 1:20 and NMT 1:10	Initial/Temporary/Semi-Permanent
Fan Room	Provide 2 fans with HEPA filters with NLT 8,000 cfm exhaust.	Semi-Permanent
Storage Room	Provide at NLT 61.4 m ²	Semi-Permanent

GUIDANCE

General. The following guidance for application of this Facility Standard is provided for design/construction agent use in coordination with the construction provider within Theater and as designated by the Service Component Commander (SCC)/ Land Component Commander (LCC) or equivalent activity as designated by the Combatant Command (COCOM). All design/construction agents shall incorporate the key mandatory design features described within the Guidance Section herein in close coordination with the US Army Corps of Engineers (USACE) Contingency - Center of Standardization (C-COS) – Middle East District, Transatlantic Division. All Temporary and Semi-Permanent Facility projects must be reviewed by the COS.

1. This section of the Facility Standard is a necessary component for determining the application and implementation of the mandatory requirements and thresholds established in this Facility Standard. The C-COS, in coordination with the Contingency Facility Design Team (FDT), is the final arbitrator for any conflicts or inconsistencies in the application of these Facility Standards as well as a mandatory reviewer prior to submission of any formal Waiver Requests. Citing project execution delays as the sole justification for expedited review or other accelerated dispensation for deviating from meeting the Facility Standards is NOT considered a compelling reason for deviation. Late submissions must be substantiated by unforeseen impact; documented life safety, health and welfare issue; or, compelling mission imperatives that cannot be met without an approved waiver.
2. This Facility Standard applies to the full range of Initial through Semi-Permanent construction solutions throughout the spectrum of operational durations.
3. Commander is defined as Combatant Commander or designee with a rank no lower than J/G-4 in the COCOM, LCC, or ASCC staff.
4. Local Commander is defined as the senior officer with facility responsibility.

Design Philosophy.

1. Doctrine, operations, and readiness requirements validation across all Doctrine, Organization, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF) domains were used as the foundation for requirements. These requirements are vetted by joint processes in response to capabilities identified through the Joint Capabilities Identification and Documentation System (JCIDS) to the maximum extent feasible. Consequently, requirements that are contained herein consider past shortfalls and gaps, current needs, and future requirements simultaneously from a facilities context. Hence, deviation from these requirements must carefully consider longer-term needs when considering temporary and/or semi-permanent solutions.
2. The primary staff activity responsible for construction in the Theater of Operations is the J/G-4 in the COCOM, LCC, or SCC staff. Consideration to logistical and fiscal tails associated with building materials, indigenous capabilities, threat, and mission scope/duration are primary decision points that override engineering solutions within a deployed or contingency arena. As such, mission decision parameters may override engineering technical solution or approach except in the areas of health and life safety. Notwithstanding are host nation or Status of Forces Agreements that are many times outside the military commander's purview. While every effort to consider sustainability, design impact, and standardized layout will be made, Force Structure, geopolitical, threat, security, and mission decision parameters will be paramount in selecting any construction solution method, materials, or approach (FM 3-34, JPub 3-34).
3. All requirements are portrayed in performance results at the function or task level. This affords a wide range of construction material and engineering method solutions that are tailorable to the mission profile of the support mission at the time a facility is planned and designed. Mission duration projections may influence the selection of materials or methods of

construction. This standard should not be utilized to perform 'what if' scenario analysis. Threat and security are critical decision components for this aspect of design application and significantly influence ultimate design and construction solutions. Essentially, if the nature of the construction is to strive for a level of durability, constructability, or efficiency commensurate to permanent construction standards and criteria, then the design and construction requirements fall outside the mission scope and intent of this Standard. It is imperative that prior to commencing planning and design, such a determination be made at the COCOM, LCC, or SCC level, whichever echelon has been designated as the "executing" or "executive" agent within Theater.

4. As a Non-Permanent solution, this Facility Standard must also consider allied, coalition, and host nation requirements that are theater unique if they exceed the UFC 1-201-01 requirements. When these conditions exist or are known habitual considerations, they shall be addressed in individual Theater Baselines contained below.

Specific Theater Design Consideration(s):

- None

Application Guidance.

The minimum requirement is a single room for administrative support.

Reference Criteria. The designs shall use the latest editions of the following design criteria:
Joint Publication

- JP 3-34, Joint Engineer Operations

The Unified Facilities Criteria:

- UFC 1-201-01 Non-Permanent DOD Facilities in Support of Military Operations

Army Regulations and Pamphlets:

- AR 420-1, Facilities Engineering, Army Facilities Management
- AR 405-70 Utilization of Real Property
- DA PAM 385-64 Ammunition and Explosives Safety Standards

Field Manual

- FM 3-34 Engineer Operations

Facility Category Code: The category code does not automatically imply specific GSF limit. "T" designates Non-Permanent Construction.

CATEGORY CODE	DESCRIPTION
T17879	Shoot House